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ABSTRACT

Forty-two first, second, and third grade students participated in a 15-week study to determine the effects of audiovisual aids on reading achievement. The students were pretested and posttested using the Comprehensive Test of Basic Skills. Each group received 40 minutes of small group and individual instruction each day. The experimental group worked with audiovisual aids as a follow-up to teacher instruction. The audiovisual aids used were the System 80 machine, the Voxcom Audible Graphic System, and the tape recorder. The System 80 machine reinforced language skills, letter and sound recognition, sight vocabulary, spelling skills, and reading in context. The Voxcom System was used as a language master to enhance vocabulary and sight word development. The tape recorder and teacher-made tapes were used to aid in the development of listening skills and comprehension. Filmstrips and accompanying cassettes were employed to assist in the development of perception, word attack, and sequencing skills. Filmstrips and tapes of well-known children's books were also used to build an appreciation for reading and to promote creative writing. The results indicated that the use of audiovisual aids did not produce significant gains in reading achievement. (Author/FL)

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Will Primary Grade Title I Students Demonstrate Greater Achievement in Reading With the Use of Audio-Visual Aids Than Those Who Haven't Utilized the Same Media?

By

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Submitted in partial fulfillment of the requirements for the Master of Arts Degree in Reading Specialization at Kean College of New Jersey

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ABSTRACT

A study was done to determine the effectiveness of audio-visual aids on reading achievement. Forty-two first, second and third grade students at Washington School, Carteret, New Jersey, participated in the fifteen week study. Students were pre and post tested with the Comprehensive Test of Basic Skills.

Each group received forty minutes of small group and individual instruction per day. The experimental group worked with audio-visual aids as a follow-up to teacher instruction. The audio-visual aids utilized were the System 80 machine, the Voxcom Audible Graphic System and the tape recorder. The System 80 machine reinforced language skills, letter and sound recognition, sight vocabulary, spelling skills and reading in context. The Voxcom Audible Graphics System, was used as a Language Master to enhance vocabulary and sight word development. The tape recorder along with teacher made tapes were used to aid in the development of listening skills and comprehension.

Filmstrips and accompanying cassettes were employed to assist in the development of perception, work attack, and sequencing skills. Filmstrips and tapes of famous

children's books were also used to build an appreciation for reading and to promote creative writing.

The results of this research indicate that no significantly different gains were yielded when a study of the effects of audio-visual aids on reading achievement was made.

ACKNOWLEDGMENTS

To my husband, Jim, and to my parents for their constant support;

To Maureen and Cathy without whom I never would have finished this course of study;

To my students at Washington School who are all very special to me;

To my sister, Mary Ann, who is putting unending hours of hard work and self-sacrifice in another direction - one far more important.

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INTRODUCTION

Since ours is a media-oriented society, the inclusion of media in the instructional program should help to maximize the learning process. The main goal of our educational system is that everyone should learn to read. For some students, learning to read is relatively simple, but many others find the acquisition of reading skills to be complex. Many programs have been developed with emphasis on audio-visual materials. The objectives of these programs are to individualize instruction and to motivate the student so that he may become involved in the reading process.

STATEMENT OF THE PROBLEM

Will primary grade Title I students demonstate greater achievement in reading with the use of audio-visual aids than those who haven't utilized the same media?

It is hypothesized that the primary grade students using audio-visual aids will not demonstate greater reading achievement as measured by the Comprehensive Test of Basic Skills when compared to the achievement of pupils who did not have the benefit of such instruction.

SIGNIFICANCE OF THE PROBLEM

The world we live in is surrounded by Media. Media is an integral part of our students' lives and should be

used to help the students progress and truly individualize instruction. Students experiencing reading difficulties need to be motivated and become interested in reading. A combined audio-visual program can stimulate, motivate and interest the child who is frustrated and discouraged by Grade 3. The outcome of this research may help in the decisions involved in totally integrating audio-visual aids into the regular reading program.

PURPOSES OF THE STUDY

This study was designed to determine whether the use of audio-visual aids can make a positive contribution to achievement in reading. It was also designed to determine the need for audio-visual aids as an integrated part of the reading program.

LIMITATIONS

The study was carried out in the normal course of the students scheduled reading class for sixteen weeks. The assigned period of time to carry out the study didn't permit research to be done into student's achievement in succeeding school years.

DEFINITIONS

Media is defined as non-textbook reading materials, such as tapes, filmstrips, records and any other audio-visual aids.

Hardware is defined as headphones, cassette players, filmstrip projector, System 80, Voxcom Audible Graphics System.

Software is defined as filmstrips, cassette tapes, records, filmslides.

System 80 machine is defined as an audio-visual aid designed to meet the needs of the individual students.

Voxcom Audible Graphics System is defined as (1) a tape recorder, and (2) a language master.

Remedial Reader is defined as a child who is reading 1.5 to 2 years below his present grade level.

Corrective Reader is defined as a student falling .6 to 1.4 years below grade level.

Developmental Reader is defined as a student who is on, above or .1 to .5 months below grade placement.

PROCEDURES

The study was conducted over a fifteen week period from October 11, 1978 to February 2, 1979. The subjects selected for this study were forty-two first, second and third grade students at the Washington School in Carteret, New Jersey. The subjects had been tested in late September, 1978 with the Comprehensive Test of Basic Skills and were diagnosed as non-readers. These students were assigned to the Title I program. The students left their

classroom for small group instruction, for a period of forty minutes, five days a week. Both groups were given the same period of instruction time with the same instructor in the same facility.

The Title I program utilized various methods, materials and approaches to assist children in learning to read. Much individualized instruction characterized the program. The audio-visual materials used were those available to all Title I teachers in the district.

The Experimental Group worked with audio-visual aids as a follow-up to teacher instruction. The audio-visual aids utilized were: the System 80 machine and accompanying kits, the Voxcom Audible Graphics System and the tape recorder.

The System 80 machine is a diagnostic and prescriptive audio-visual learning system which provides individualized instruction for each child. Prior to working in any kit, each child took a pre-test which prescribed the lessons he/she should do. After the child completed each lesson, he/she took a self-scoring progress check. Upon completion of each kit, the child was then post-tested to measure his/her progress.

The System 80 machine was utilized to provide the first grade group with instruction and reinforcement to

develop language skills, letter and sound recognition, sight vocabulary and spelling skills. This program of System 80 was also employed to reinforce phonic skills, sight word vocabulary, spelling skills and reading in context to the second and third grade groups.

All three groups worked individually when utilizing the Voxcom Audible Graphics System as a Language Master. Words were presented in phrases or sentences. The student was able to listen and immediately check his answer. The Harris Jacobson Core List was the basis of the vaocabulary list.

The tape recorder and teacher-made tapes were used for various activities including the development of listening skills. The tapes also contained lessons in which the children were to listen and follow directions. There were also lessons with stories on tape followed by questions involving comprehension. A ditto presenting the story and questions accompanied each tape.

Other materials and methods were used periodically such as: teacher and commercial made games and experience charts. Filmstrips and cassettes were used to aid in the development of perception, word attack and sequencing skills. Filmstrips and accompanying tapes of famous children's books were employed to build an appreciation

for reading and to promote creative writing.

A number of the materials used were machine oriented, the others were included to avoid any over dependency on the machines and to aid in the transfer of skills from machinery to the printed page. The Modern Curriculum Press Phonics workbooks, Merrill workbooks, the Barnell Loft Series and the Houghton Mifflin Readers were some of the materials used following teacher instruction in both the experimental and control groups.

The control group received teacher instruction covering the same content but without the use of audio-visual aids for reinforcement of instruction. The teacher worked with the control groups in small groups and gave individualized instruction. The teacher used extra worksheets, instructional materials, and learning centers as a follow-up to teacher instruction.

At the end of the fifteen week period, the Comprehensive Test of Basic Skills was administered to both the experimental and control groups. These tests were scored and evaluated. Test results for both groups were compared.

RESULTS

The purpose of this investigation was to assess the effect of increased audio-visual methods and materials on reading achievement for primary grade non readers.

The Comprehensive Test of Basic Skills was administered [7] as the Pre Test and Post Test.

The hypothesis to be answered by analysis of the data was whether a statistically significant difference in achievement could be shown in reading improvement for those students exposed to intensive audio-visual aids when compared to the achievement of a sample not utilizing such materials.

The Critical Ratio was determined by using the formula

$$C.R. = \frac{Mx-My}{mx-my}$$

where Mx, My are the mean reading score gains for the Experimental and Control groups and Mx-My is the pooled standard deviation.

In a comparison of the Comprehensive Test of Basic Skills Grade 1 pre test results,

Table I

Comparison of the First Grade Pre Test Results of the Experimental and Control Groups - CTBS

Groups	M		C.R.	Z
X Experimental	.7	.05	3.0	.99
Y Control	.6	.06		* ns

* ns= not significant

it can be seen that the groups were essentially well matched. In the first grade total reading pre test, the C.R. was 3.0, the t of .99 proved to be not significant.

In a comparison of the Comprehensive Test of Basic Skills Grade 1 post test results,

Table II

Comparison of the First Grade Post Test Results of the Experimental and Control Groups - CTBS

Groups	M		C.R.	Z
X Experimental	1.3	.02	12.5	*ns
Y Control	1.1	.03		

*ns= not significant

The data are presented graphically in Figure I. 9

Figure I

Comprehensive Test of Basic Skills
Comparison of Gains

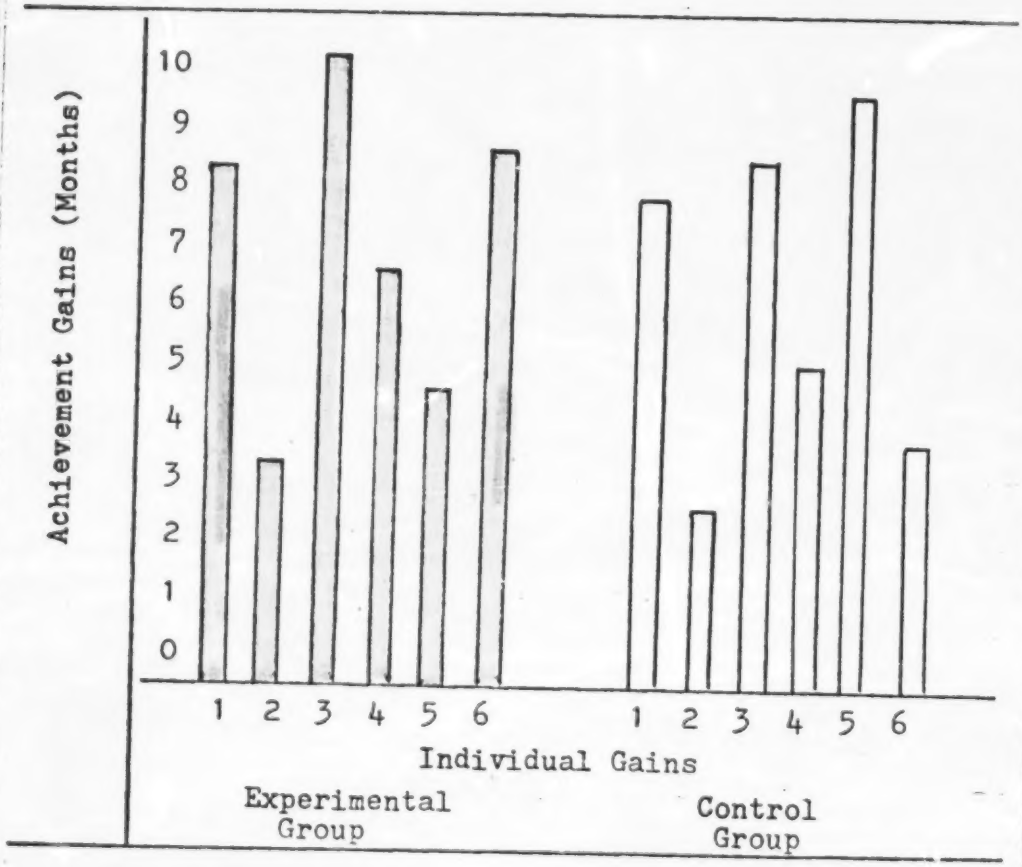

Figure I indicates the individual gains made by the students in each first grade group.

In a comparison of the Comprehensive Test of Basic Skills Grade 2 pre test results, it can be seen

Table III

Comparison of the Second Grade Pre Test Results of the Experimental and Control Groups - CTBS

Groups	M		C.R.	Z
X Experimental	1.7	1.9	.6	.45 * ns
Y Control	1.8	.13		

*ns= not significant

that the groups were essentially well matched. In the second grade total reading pre test, the C.R. was .6. A t of .45 proved to be not significant.

In a comparison of the Comprehensive Test of Basic Skills Grade 2 post test results,

Table IV

Comparison of the Second Grade Post Test Results of the Experimental and Control Groups - CTBS

Groups	M		C.R	Z
X Experimental	2.3	.06	6.6	*ns
Y Control	2.1	.03		

*ns= not significant

the C.R. was 6.6. A t of 6.6 proved to be not significant.

The data are presented graphically in Figure II.

Figure II

Comprehensive Test of Basic Skills

Comparison of Gains

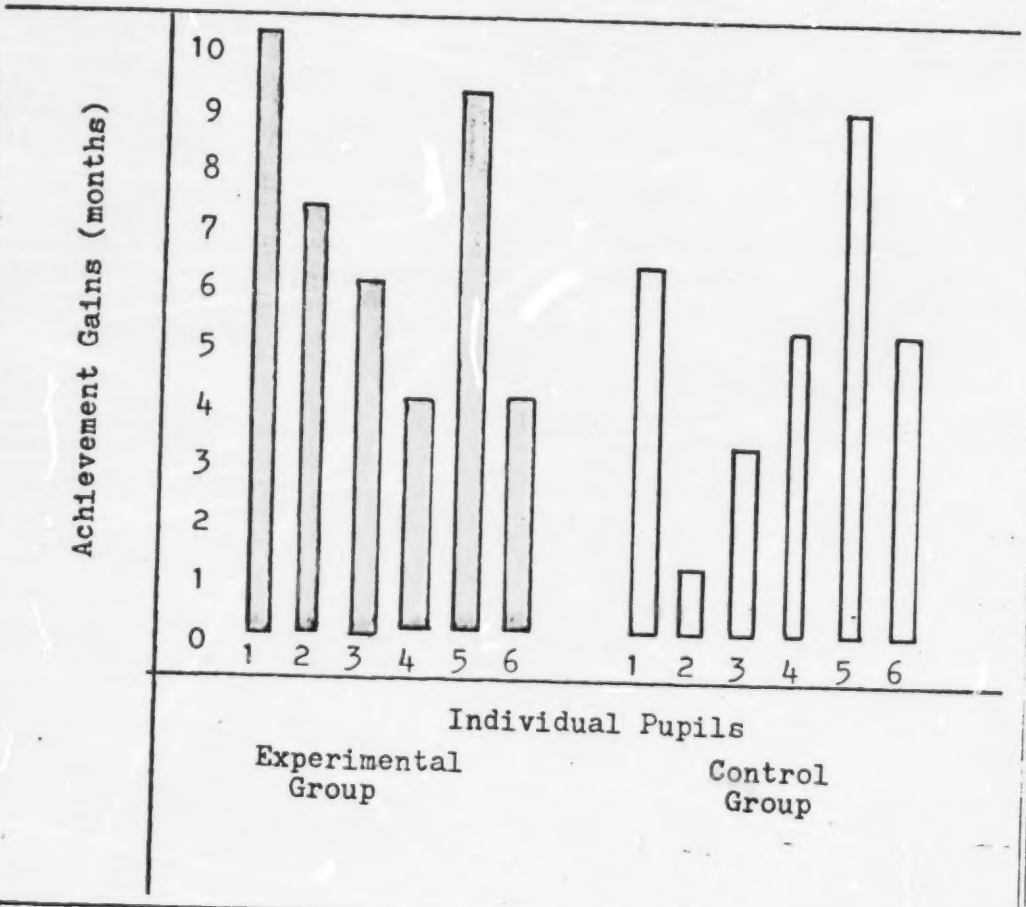

Figure II indicates the individual gains made by the student in each second grade group.

In a comparison of the Comprehensive Test of Basic Skills Grade 3 pre test results,

Table V

Comparison of the Third Grade Pre Test Results of the Experimental and Control Groups - CTBS

Groups	M		C.R.	Z
X Experimental	2.0	.3	0	*ns
Y Control	2.0	.29		

*=not significant

it can be seen that the groups were almost perfectly matched. In the third grade total reading pre test the C.R. was 0.

In a comparison of the Comprehensive Test of Basic Skills Grade 3 post test results,

Table VI

Comparison of the Third Grade Post Test Results of the Experimental and Control Groups - CTBS

Groups	M		C.R.	Z
X Experimental	3.0	.17	.66	.49 *ns
Y Control	2.7	.23		

*ns= not significant

the C.R. was .66. A t of .49 proved not significant.

The data are presented graphically in Figure III.

Figure III

Comprehensive Test of Basic Skills
Comparison of Gains

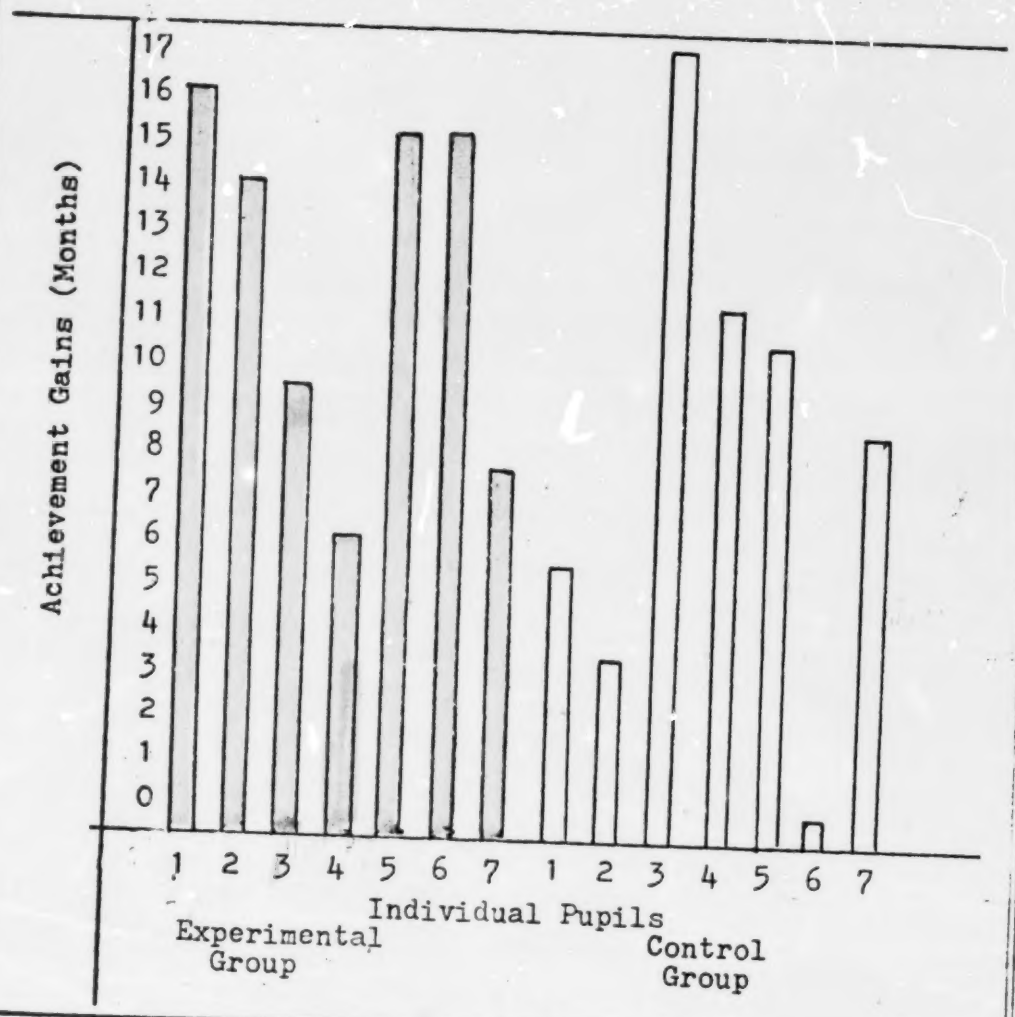

Figure III indicates the individual gains made by the students in each third grade group.

CONCLUSIONS AND IMPLICATIONS

Traditional programs, it has been assumed, may be ineffective for unmotivated children or slow learners. The teacher is expected to design a program to encompass a variety of methods, materials and approaches. Visual aids, if properly utilized, may be beneficial in making thoughts expressed in writing more clear. Children seem to respond positively to a program employing audio-visual aids. However, the results of this research indicate that no significantly different gains were yielded when a study of the effects of audio-visual aids on achievement was made on these grade levels.

Children in the first grade experimental group made gains in reading achievement ranging from four to eight months. The children in the control group made gains from two to seven months growth.

Children in the second grade experimental group made gains in reading achievement ranging from four to eight months. The children in the control group made gains from two to six months growth.

Children in the third grade experimental group made gains in reading achievement ranging from six to fifteen months. The children in the control group made gains from zero to fifteen months growth. All students in the experimental groups showed gains while all students in the

control groups made gains except one student who regressed slightly.

Research studies have supported the theory that no one method is best. Rather a combination of methods is recommended since different children learn from varied approaches. Therefore, the Title I Reading Program in Carteret employs a multi-media approach. The children involved in the control group were in a reading situation incorporating many approaches. The indications from the test results were that these children made progress in reading achievement. With additional variety and use of audio-visual materials and methods, utilizing more of the senses and providing an additional motivational factor, the experimental group did show a higher reading achievement growth. This growth, however, was not of such magnitude as to indicate statistical significance.

Though the results of this study do not support the notion that a wide variety of audio-visual aids to instruction will prove beneficial in promoting statistically significant reading achievement, the results are suggestive since mean differences in favor of the experimental treatment exacted at all three grade levels. The limitations of a small sample and the brevity of the

experimental period indicate the need to extend the study to determine whether these conclusions are supported.

BIBLIOGRAPHY

Allen, William. "Intellectual Abilities and Instructional Media Design." ERIC ED095520 (january, 1975), p. 82.

Borman, Eva C. "How Do You Turn Them On After They've Been Turned Off?" Paper presented at the Farwest Regional Conference of the International Reading Association, Reno (February 6-8, 1975).

Bravo, Ann. "An Evaluation of the Urban Education Sensory Stations Program." District 10, New York (June, 1970).

Button, Mary. "An Experiment to Determine the Effectiveness of Using Audio-Tapes for Independent Activities in a First Grade." Little Rock, Arkansas, 1972.

Clark, Sara H. "Basic Skill Centers of Minneapolis." ERIC ED111880.

Crawford, Gail, Conelly, Dick. "Meet You in the Reading Lab." Journal of Reading. (October, 1971), pp.16-20.

Dietrich, Dorothy M. "Using Videotape to Motivate Junior High Students to Read." (May 1-4, 1974).

Harris, Albert J., Morrison, D. "CRAFT Project: A Final Report." Reading Teacher, 22:335-40 (January, 1969).

Hempstead, John Orsen. "Media and the Learner." ERIC ED095827, January, 1975.

Judson, Arlene. "An Individualized Audio-Visual Instructional Program for Primary Grade Students with Reading Problems." ERIC ED081218.

Project MOPPET: Media Oriented Program Promoting Exploration in Teaching. Educational Programs that Work, Volume 1 (Fall, 1975).

Smith, Nila Banton. "Instructional Technology and Reading: Progress, Problems, and Promise." Detroit (May 10-13, 1972), pp. 13-19.

Strang, Harold R. "An Automated Approach to Remedial Reading." Paper presented at the convention of the American Educational Research Association. (February 4-7, 1971).

Wurster, Stanley R. "Happiness if Reading." Reading Resource Center Glendale Elementary School, District No. 40, Second Year Title I Project, Arizona. (August, 1974).

TESTS

Comprehensive Test of Basic Skills, Form S, Level B.
CTB/McGraw-Hill Incorporated: Monterey, California.

Comprehensive Test of Basic Skills, Form S, Level C.
CTB/McGraw-Hill Incorporated: Monterey, California.

Comprehensive Test of Basic Skills, Form S, Level 1.
CTB/McGraw-Hill Incorporated: Monterey, California.